

PATENT

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ABSTRACT OF THE DISCLOSURE

A method of processing a substrate comprising depositing a layer comprising amorphous carbon on the substrate and then exposing the substrate to electromagnetic radiation have one or more wavelengths between about 600 nm and about 1000 nm under conditions sufficient to heat the layer to a temperature of at least about 300°C is provided. Optionally, the layer further comprises a dopant selected from the group consisting of nitrogen, boron, phosphorus, fluorine, and combinations thereof. In one aspect, the layer comprising amorphous carbon is an anti-reflective coating and an absorber layer that absorbs the electromagnetic radiation and anneals a top surface layer of the substrate. In one aspect, the substrate is exposed to the electromagnetic radiation in a laser annealing process.

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